



NATIONAL WEATHER SERVICE

Western Region Notes

JUNE 3, 2004

REGIONAL DIRECTOR'S OFFICE



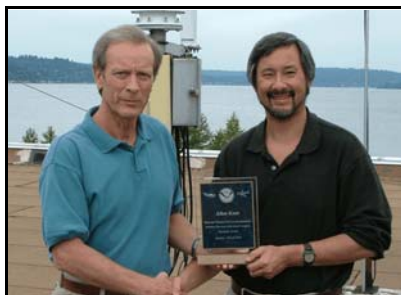
Ron Lam, WFO Sacramento, Wins National Award for Promoting Workplace Diversity: A well deserved spotlight shined on many NWS employees during a recent NOAA Awards Ceremony in Silver Spring, Maryland. Ron Lam, a meteorologist at WFO Sacramento was one of three NOAA employees to receive a national award for effectively promoting diversity in the workplace and motivating high school students in the field of meteorology.

Ron received the NOAA Spectrum Achievement Award from Vice Admiral Conrad C. Lautenbacher, Jr., USN

(Ret.), Undersecretary of Commerce for Oceans and Atmosphere and NOAA administrator.

Ron, a Chinese-American with Parkinson's disease, hasn't let his lack of mobility or his medication limit his quality of life or zest for his job. He shares his scientific knowledge whether he is tutoring new staff members in the office or by helping the community understand meteorological concepts when he meets them during various outreach activities. The work he has done over the past year in outreach to school groups and mentoring of college students is particularly noteworthy.

As office's webmaster, Ron is constantly updating and improving the NWS Sacramento webpage. The page routinely receives praise from customers, and last fall it was rated the sixth most visited page for fire weather information. Recently he completed an update to ensure compliance with the 1998 amendment to the Rehabilitation Act that requires Federal agencies to make their electronic and information technology accessible to people with disabilities (Section 508 (29 U.S.C. ' 794d)).



Allen Kam Receives Aviation Award: Congratulations to Allen Kam, of WFO Seattle, for being a 1st quarter recipient of the Aviation Awards Program. As Aviation Program Leader and Aviation Liaison officer for Washington state, Allen has an extensive outreach program. This includes managing WFO Seattle's booths at the annual Northwest Aviation and Trade Show and the annual Northwest Experimental Aircraft Fly-In; writing aviation safety articles for the state of Washington's Division of Aeronautics Newsletter; and conducting the

weather portion of numerous pilot safety seminars.

Chuck Smith, FAA Safety Counselor, said about a seminar Allen presented, "Mr. Kam conducted an aviation safety seminar entitled 'Aviation Weather by the Internet' during January and February, 2004. His presentations achieved the highest learning level for all pilots in attendance. Mr. Kam's presentation skill enthralled the pilot audience and left them without any hesitation that the knowledge they had gained would greatly enhance their flying skill. We are extremely grateful that the National Weather Service has men and women of Mr. Kam's caliber on its staff."

Honoring WR Coop Observers: The NWS Cooperative Observer Program is honoring 11 observers with Thomas Jefferson Awards and 26 observers with John Campanius Holm Awards for 2004. These two prestigious national awards recognize outstanding cooperative observers.

Western Region is honored to have three Jefferson Award winners and six Holm Award winners:

Jefferson Awards

- C George S. Hatch, nominated by WFO Salt Lake City
- C Eugene Cronrath, nominated by WFO Spokane
- C Frank Kolar, nominated by WFO Great Falls

Holm Awards

- C Edmund R. Somerfield, nominated by WFO Great Falls
- C Grace and Charles Meyers, nominated by WFO Billings
- C Frenchy Montero, nominated by WFO Elko
- C John L. Stoner, nominated by WFO Great Falls
- C Ron Hafner, nominated by WFO Monterey
- C John P. Chase Jr., nominated by WFO Billings

AROUND THE REGION

Photos of the Week:



Meteorologists at WFO Reno initiate a courageous and daring mouse hunt in the operations area. So far, Team Reno: 0. Team Mice: 1.

METEOROLOGICAL SERVICES DIVISION

Statement of the Week: This week's Statement of the Week is a Fire Weather Watch (RFW) issued by Brian Francis of WFO Tucson. Brian's watch met all the requirements of the new NWSI 10-401 and serves as a fine example to all of a RFW statement. The product also verified well as Red Flag Warnings were issued the following two days for the fire weather zones included in the Fire Weather Watch. Thanks Brian!

FIRE WEATHER WATCH
NATIONAL WEATHER SERVICE TUCSON AZ
900 PM MST WED MAY 19 2004

AZZ146-147-148-201430-

.....FIRE WEATHER WATCH FOR PORTIONS OF SOUTHEAST ARIZONA (FIRE WEATHER ZONES 146 AND 148 AND EASTERN PORTIONS OF ZONE 147) THURSDAY AND FRIDAY FROM 11 AM UNTIL 7 PM MST FOR GUSTY SOUTHWEST WINDS.....LOW RELATIVE HUMIDITIES AND EXTREME FIRE DANGER.....

FIRE WEATHER ZONES AFFECTED BY THE FIRE WEATHER WATCH:
ZONE 146 (NORTHERN GRAHAM AND NORTHERN GREENLEE COUNTIES)
ZONE 147 (EASTERN PORTIONS OF SOUTHEAST PINAL COUNTY)
ZONE 148 (SOUTHERN GRAHAM.....SOUTHERN GREENLEE.....SANTA CRUZ.....COCHISE AND EASTERN PIMA COUNTIES)

DISCUSSION.....THE NATIONAL WEATHER SERVICE HAS ISSUED A FIRE WEATHER WATCH FOR LOW RELATIVE HUMIDITIES AND GUSTY SOUTHWEST WINDS THURSDAY AND FRIDAY FROM 11 AM TO 7 PM MST FOR PORTIONS OF SOUTHEAST ARIZONA. A TROUGH OF LOW PRESSURE ALONG THE PACIFIC COAST WILL DEEPEN.....RESULTING IN BREEZY TO WINDY CONDITIONS ACROSS PORTIONS OF SOUTHEAST ARIZONA. A VERY DRY AIRMASS WILL REMAIN DURING THE NEXT SEVERAL DAYS WITH RELATIVE HUMIDITY VALUES RANGING FROM THE SINGLE DIGITS TO LOWER TEENS. WINDS ARE EXPECTED TO BE BORDERLINE CRITERIA FOR THURSDAY WITH SUSTAINED SOUTHWEST WINDS OF 15 TO 25 MPH AND GUSTS UP TO 35 MPH EXPECTED. THESE WINDS MAY INCREASE SLIGHTLY ON FRIDAY AS THE PACIFIC COAST THROUGH DEEPENS. THE COMBINATION OF GUSTY SOUTHWEST WINDS... LOW RELATIVE HUMIDITIES AND VERY HIGH FIRE DANGER HAS PROMPTED THE ISSUANCE OF THIS FIRE WEATHER WATCH.

PLEASE ADVISE THE APPROPRIATE OFFICIALS OR FIRE CREWS IN THE FIELD OF THE FIRE WEATHER WATCH FOR PORTIONS OF SOUTHEAST ARIZONA ON THURSDAY AND FRIDAY.



The 2004 Marine Workshop group

Western Region Hosts Regional Marine Workshop:

Western Region hosted a Regional Marine Workshop at the Naval Postgraduate School in Monterey, CA, May 18-21. As with previous years, this year's workshop jointly involved Western, Alaska, and Pacific Regions, with one forecaster attending from all the WFOs in each Region.

The major focus was on providing training to new or less experienced marine forecasters, with a major emphasis on wind and wave analysis and forecasting.

Western Region invited Dr. Steve Lyons (The Weather Channel), an expert on wave analysis and forecasting, to attend and provide instruction to forecasters. Additional topics focused on understanding the needs and sensitivities of marine customers, mesoscale (coastal) wind systems, numerical wave models, polar satellite imagery/products, satellite-derived winds, and the Voluntary Observing Ship (VOS) program. Representatives from the Ocean Prediction Center, Tropical Analysis and Forecast Branch, and the National Data Buoy Center also provided briefings on their respective functions and responsibilities.



"Forecaster Scott Carpenter gives a student a "hair raising" experience"

WFO Billings participates in Laurel Aviation and Technology Week:

On May 10, WFO Billings WCM Jim Scarlett met with approximately 240 students (grades 6-8) from the Laurel, MT, school system to talk about career paths in meteorology and NOAA, demonstrating the technologies used by today's meteorologists and hydrologists. This was the first part of "Laurel Aviation and Technology Week", a large multi-state gathering for students grades K-12 to explore the latest in aviation and technology developments and explore associated career paths.

On May 12-13, WFO Billings hosted a booth as part of a large exhibit forum with more than 100 speakers and agencies representing a wide range of corporate and government agencies. During these two days, more than 14,000 students and adults from eastern Montana, northern Wyoming, and parts of North Dakota were in attendance. Staff members from WFO Billings demonstrated the Van de Graff "lightning" machine to the students and explained how lightning worked and also talked about lightning safety. The "Pet Tornado in a Jar" was also a big hit with the younger students. In all, WFO Billings passed out more than 2000 materials to students and teachers, such as the recent Torri Hunter Lightning Safety poster, the new cloud charts, business cards with web address info, balloons, and "Sammy Siren" stickers. A good time was had by all!



(L to R): Larry Akers (Montana DES), Linda Conner (Fort Peck Tribes DES), Del Brewer (FEMA Region VIII Tribal Affairs Representative), and Brigadier General Frank Tobel (Montana Dept of Military Affairs)

WFO Glasgow Assists Montana Tribe in Establishing Pre-Disaster Mitigation Plan:

On May 10, Tanja Fransen (WCM, Glasgow) attended a meeting at which the Fort Peck Reservation Tribal Council was formally recognized by FEMA Region VIII and the State of Montana Department of Military Affairs for being the first tribal nation in Montana (and FEMA Region VIII) to have an approved Pre-Disaster Mitigation Plan. The tribal Department of Emergency Services Coordinator, Linda Conner, worked closely with surrounding counties and WFO Glasgow to document hazards (including weather hazards) facing the tribe, and to come up with mitigation solutions. The plan is designed to minimize the impact of anticipated hazards on tribal residents and facilities. Tribal chairman, John Morales, accepted letters of recognition from the State of Montana Indian Affairs, FEMA

Region VIII Tribal Affairs, Montana National Guard, and the Montana Hazard Mitigation Office.

Severe Weather Awareness Week in Montana: The four Montana WFOs provided education and awareness to the citizens of Montana during their annual severe weather awareness week, April 19-23, 2004. WCMs at the four offices participated in a live call-in radio talk show on April 19. This show, broadcast across the state, was hosted by radio personality Dave Berg and 2003 NOAA Environmental Hero Award winner, John Pulasky. Mr. Pulasky, with the assistance of Jim Scarlett (WCM, Billings) and Tanja Fransen (WCM, Glasgow), recorded a series of public service announcements which aired across Montana on the Northern Broadcasting System family of radio stations. The four offices also provided a variety of severe weather information on their web pages.

Individual offices in Montana provided the following additional services during Severe Weather Awareness Week:

In Great Falls, Rick Dittmann (WCM) recorded three other PSAs, which aired on the Central Montana Radio Network. This network has broadcast PSAs for NWS on both winter and severe weather awareness topics for three years. The WFO Great Falls staff also conducted 13 live radio interviews during the week.

Peter Felsch (WCM, Missoula) activated the EAS system with a TEST Severe Thunderstorm Warning for Lincoln County, Montana. The WFO Missoula staff provided an Earth Day Presentation to 120 students at Philipsburg Elementary School and also a presentation to a local Lion's Club chapter. Additionally, Peter conducted live media interviews with local ABC, NBC, and CBS television affiliates and two local radio stations.

Jim Scarlett (WCM, Billings) led a local siren activation (test), in coordination with dissemination of a TEST tornado warning (including EAS). This test involved local ham radio operators in the Yellowstone County (Billings) area. He also worked with local television affiliates to broadcast severe weather message themes as part of their nightly newscasts. Jim was featured on live local radio each day as part of severe weather awareness week.

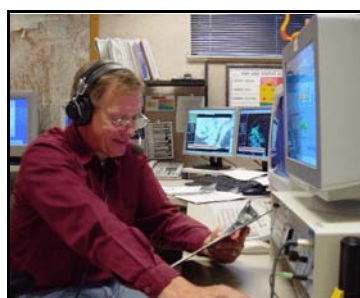


Pocatello Service Hydrologist Sherrie Hebert (kneeling, with hat) teaches students about hydrologic hazards.

Pocatello Service Hydrologist Helps with Water

Awareness Festival: Sherrie Hebert, Pocatello Service Hydrologist, was caught “playing in the sand” at the 11th annual Water Awareness Festival, held at Tautphaus Park in Idaho Falls, Idaho, as part of the Idaho Water Awareness Week educational program. This festival provides water-related activities designed to help children appreciate water.

About 500-600 students, along with their teachers, apply to participate in the festival each year. This year, Sherrie and over 100 sixth graders experienced the causes and dangers of flooding and flash flooding. Together, they inundated the make-believe town of Waterville (created in a sand box) with floods, simulating rapid spring snow pack melt-off and summer (flash flood) situations. The students learned about the National Weather Service — specifically, what watches and warnings are and what to do when they are issued. They also learned about good planning habits for those living near rivers and lakes. Other participating agencies included the Natural Resources Conservation Service, US Geological Survey, Department of Environmental Quality, Idaho Falls Zoo, and Idaho National Engineering and Environmental Laboratory.



WFO Pocatello HMT Gary Wicklund reads the EAS Routine Monthly Test

Idaho WFOs Conduct Severe Weather Awareness Week:

WFOs Pocatello and Boise recently teamed up for the Idaho Severe Weather Awareness Week, May 8-14. In Boise, news media broadcast public information statements with a separate theme each day. In Pocatello, the week began with a “Weather, Water, and Climate” workshop on Saturday, May 8. Each day, WCM Vernon Preston and HMT Gary Wicklund prepared public information statements. A test of the Emergency Alert System (EAS) was conducted on May 11. Various state/local agencies and school districts used this test to conduct severe weather preparedness drills. Additionally, local radio, television, and newspaper

interviews were conducted by operations staff.



Joy McDonald (Ninety-Nines Organizer) and Ken Simosko

Flying Companion Seminar Held in Idaho Falls: WFO Pocatello Meteorologist Ken Simosko recently spoke to the Eastern Idaho Ninety-Nines Women’s Pilots Association in Idaho Falls. Ken spoke about severe weather basics, Terminal Aerodrome Forecasts, and Transcribed Weather Broadcast Service products.

The Ninety-Nines is an organization of licensed women pilots from 33 countries. The majority of its 6,500 members live in the United States. The organization is comprised of members that fly in all capacities — ranging from recreation to business, and more. Some fly for the airlines, the military, in air races and air shows, as instructors, and even in the space shuttle.

The Ninety-Nines is an international organization. The Group is divided into Sections and chapters (Idaho belongs to the Idaho Chapter, Northwest Section). They serve mainly educational and philanthropic interests, for example, awarding scholarships to women to advance their aviation careers, and putting on educational programs. They also participate in air races and “air-marking” airports (painting airport names and/or compasses at airports, visible from the air).

The name “Ninety-Nines” came about in 1929, following the first all women’s transcontinental air race. A group of women decided to invite all 117 American female licensed pilots to support the advancement of aviation. Ninety-nine women responded, and the group was named for those 99 charter members. The headquarters of the Ninety-Nines is located in Oklahoma City.



Meteorologist Mike Huston demonstrates static electricity to a third grade student

Pocatello Lead Forecaster Presents to Elementary

Classes: Pocatello Lead Forecaster Mike Huston recently went to Stewart Elementary in Shelley, ID, where he talked to six 3rd grade classes, totaling 160 students. Mike presented a 15-minute video on severe weather and then gave a 30-minute presentation covering tornadoes, flash floods, and lightning safety. A few hands-on experiments were also carried out. These experiments included creating a “cloud-in-a-bottle,” exploring how static charge builds up in clouds by using balloons, and showing how precipitation rates affect the occurrence of flash floods by using sponges

and spray bottles. The presentation was well received by the students and teachers.



WFO Portland Lead Forecaster Wanda Likens judges an experiment on Climatic Warming over Antarctica

WFO Portland Participates in International Science and Engineering Fair:

The 2004 Intel International Science and Engineering Fair was held in Portland, OR, May 11-13, 2004. The fair included more than 1,300 students from 40 countries, including several students from Oregon and Washington. WFO Portland participated in the fair by serving as judges and staffing a booth that had an interactive science experiment.

WFO Portland SOO, Bill Schneider, and Lead Forecaster, Wanda Likens, served on the judging panel on May 11-12 to evaluate the students and their projects.

Each project began with a central question or hypothesis, and students had to probe deep for answers with analysis that sometimes took them to laboratories of scientists. Often these projects lead students to careers in science and engineering, which may end up offering practical ways to solve many problems we encounter day-to-day.

On Thursday, May 13, several agencies and corporations from the Portland Metro area staffed booths with interactive science experiments for 500 elementary students from the Portland School Districts. WFO Portland’s WCM, Tyree Wilde, staffed an outreach booth and conducted an interactive lightning experiment for the students. The Electronics Staff at WFO Portland set up an F-420 wind equipment unit and a rawinsonde to show students how the NWS gathers data that forms the basis of

weather forecasting. The students learned about the basic principles of lightning and thunderstorms as well as lightning safety.



Senior Service Hydrologist, Andy Bryant provides information to Washington County Emergency Coordinator, Sue Patterson

WFO Portland Participates in Oregon Emergency Management Conference:

WFO Portland's WCM, Tyree Wilde, and Senior Service Hydrologist, Andy Bryant, participated in the Oregon Emergency Management Conference, May 17-19, 2004. Tyree and Andy gave a presentation to a group of 100 emergency managers from city, county, and state agencies, which focused on NWS Digital Services, NOAA Weather Radio's All Hazards capability, the Advanced Hydrologic Prediction Service, and forthcoming changes to NWS hydrologic products. They also staffed an outreach booth during the three-day event and distributed materials on NWS products and services. Three companies that specialize and market

Geographic Information System technology also had outreach booths to market their products and were very interested to learn about NWS digital data and how it can be used as a data source in their product.



Ted Buehner (WFO Seattle) conducts the SAR Weather Support Class

WFO Seattle Provides Class at Washington State Search and Rescue Conference:

WFO Seattle's WCM, Ted Buehner, conducted a Search and Rescue (SAR) Weather Support class at the 2004 Washington State Search and Rescue Conference, held on May 21. The 2-hour class was held in a large tent at a campground in eastern Lewis county (south of Mt Rainier). About 800 people attended the conference, 30 of which attended the class. Class material included NWS operations, the National Digital Forecast Database, Washington state weather hazards, regional weather patterns, and an overview of Seattle's web page, including how to request spot forecasts in support of SAR operations.

WFO Elko Meets with Nevada SECC: On May 5, WFO Elko staff met with Adrienne Abbot, Chairperson of the Nevada State Emergency Coordination Center (SECC). The News Director from a local radio station in Elko was also in attendance. Adrienne provided an Emergency Alert System (EAS) briefing, covering national, state, and regional levels and the relationships and responsibilities of the individual broadcasters and NWS.

Since last summer, WFO Elko has been working with the Elko County Local Emergency Planning Committee (LEPC) and the Eastern Nevada EAS Committee to improve emergency communications in Elko County. On May 7, the first part of the plan was successfully implemented upon receipt of 74 NOAA Weather Radio Receivers, which will be distributed to Elko County Schools and municipal buildings.

WFOs in Elko, Reno, and Las Vegas are working with the Nevada SECC to install EAS encoder/decoders at each office, which will allow direct transmission of emergency messages. The Elko County LEPC, through a Homeland Security Grant (Office of

Domestic Preparedness Federal Fiscal Award — Phase II), has already approved funding to purchase an EAS encoder/decoder.

WFO Seattle Supports Rescue Operations on Mt. Rainier: NWS forecasters in Seattle know if they receive a request for weather forecasts for an impending Search and Rescue (SAR) mission on Mt. Rainier, there's trouble brewing on the mountain.

On May 15, such a request came to the NWS from the National Park Service (NPS). Forecasters were told a pair of climbers were stranded on the final leg of their trek to reach the 14,410-foot summit in the Washington Cascade Mountains. The NPS said they had received a cell phone call that one of the climbers had fallen, and help was needed. The forecasters soon learned that Scott Richards and Peter Cooley, both experienced climbers from Cape Elizabeth, Maine, had made it to the 12,300 foot level and were preparing for their final ascent. Suddenly Cooley tripped, fell more than 30 feet down a steep, icy slope, and hit his head on a rock.

Cooley's partner called park officials for assistance, but adverse weather did not permit an immediate air rescue. Ground crews began ascending the mountain on May 16, and reached them on the morning of May 17. The crew provided immediate medical attention to the injured climber, and also provided survival supplies.

WFO Seattle provided related aviation and ground support weather briefings beginning on May 15 (Saturday). Mt. Rainier National Park officials used WFO Seattle's web site spot forecast request and talked with forecasters directly via telephone. On Monday afternoon, WFO Seattle indicated a possible window of opportunity to fly a helicopter to the site during a break in shower and thunderstorm activity. Rescue personnel took advantage of the opportunity. They reached the climber and successfully hoisted him into the helicopter. Tragically, the climber died while enroute to Madigan Hospital near Tacoma.

WFO Seattle continued to provide SAR support weather briefings through May 19 to support ground crews in bringing the remaining climber back down the mountain, and also provided additional aviation briefings to aid air crews in removing supplies.



MAFFS C-130s (landing, and on the tarmac) at Tucson International Airport

WFO Tucson Provides Weather Briefings for MAFFS:

WFO Tucson provided daily weather briefings to approximately 75 personnel attending the "Modular Airborne Firefighting System" (MAFFS) training at Tucson International Airport, April 26-30. Gary Zell (Forecaster at WFO Tucson) provided the weather briefings each day at 7:00 a.m. Gary assembled material for each briefing, including combined public/fire weather forecasts, aviation forecasts, upper air analyses/forecasts (500mb/700mb), and a 5-day forecast vertical wind profile (centered on Tucson).

The U.S. Forest Service (USFS) conducted the annual pilot training with the primary objective of certifying pilots for national fire weather air support operations. This was the first time Tucson has hosted the MAFFS training. Retardant drop sites were in the Santa Rita, Whetstone, and Rincon mountains. Thunderstorms in the vicinity of Tucson

Airport suspended operations for 90 minutes on the second day, April 27. Operations were also suspended the entire afternoon on the fourth day, April 29, due to high wind and moderate-to-severe turbulence. The aircraft included eight C-130s, with in-service dates ranging from 1962-1986. Pilots involved in the training have military (current or prior) and/or commercial experience and are contracted by the USFS for fire retardant drops.



University of Arizona ATMO350 class at the Tucson International Airport ASOS

WFO Tucson Helps Conduct Class at University of

Arizona: WFO Tucson and the University of Arizona Atmospheric Sciences Department recently collaborated to provide students practical experience with observational instrumentation. Erik Pytlak (Tucson SOO) and Norm Phelps (Electronic Technician) conducted portions of a University of Arizona Atmospheric Sciences class on Weather Instrumentation. Erik taught the students about different types of weather instrumentation used by National Weather Service to gather data for routine daily operations, and also for use as input to numerical forecast models.

Norm led a tour of the Automated Surface Observation System (ASOS) and the Upper Air equipment.

HYDROLOGY AND CLIMATE SERVICES DIVISION

Shortages on the Colorado River: On May 18, Dave Brandon (HIC, CBRFC) and Tony Haffer (MIC, WFO Phoenix) attended a meeting on "Shortages on the Colorado River", sponsored by the Arizona Department of Water Resources. The meeting provided a forum for the Public and other interested water users to begin discussions on developing criteria for addressing potential shortages on the Colorado River and the ongoing drought.

Hydrologic Observatory: On May 24, Dave Brandon and Greg Smith (CBRFC) attended a meeting that discussed the development of a Long Term Hydrologic Observatory proposed for the Great Basin. The meeting was sponsored by a cooperative group of interdisciplinary scientists, mainly from the academic community. It was hosted by Dr. David Tarboton, professor of Hydrology at Utah State University. Dave provided a short synopsis of NOAA/NWS/CBRFC, our mission, and interests that we may have in the Observatory. The proposal is currently being developed and will be submitted to the National Science Foundation, competing with other proposals throughout the country.

HCSD Review Held at WFO Las Vegas: Melissa Smith, along with Senior Service Hydrologist Gary Barbato (WFO Reno) and Senior Service Hydrologist Tom Zickus (WFO Phoenix), visited WFO Las Vegas to conduct a Hydrology Program review. The program review went very well and numerous ideas were generated. It was a great experience for everyone involved. The visit also included a tour of Hoover Dam by James Bayne, the USBR Regional Dam Safety Program Manager from the Boulder City Regional Office.



Elko Hydro Days 2004: WFO Elko hosted Hydrology Days on May 4 -7. Service Hydrologist Gary Barbato (WFO Reno) and focal point Larry Whitworth (WFO Elko) invited the USGS to meet in Elko and provide information about their partnership with the NWS. The USGS provided field trips to three river gages in the Elko hydrologic service area (HSA) and spoke at the annual Hydrology Seminar held at WFO Elko.

Ten Elko staff members visited gage sites and got first-hand knowledge of instrumentation and collaboration between the USGS and the NWS. The USGS gave a very detailed explanation of their duties on-site at Lamoille Creek and South Fork River on May 5. The following day, they did the same for the site along the Humboldt River at Palisade and provided a hands-on demonstration of flow measurement using the latest instrumentation. A seminar was held on May 7. The USGS and Gary Barbato spoke about data inherent in the NWS E-19 Report on River Gage Station form needed for accurate gage documentation. WFO Elko has a newly-formed team tasked with acquiring information necessary to completely document each site within the Elko HSA.

Hydrology Days 2004 was a success due to the abundance of expressed interest by the WFO Elko staff, the USGS collaboration, and the coordination between Service Hydrologist Gary Barbato and focal point Larry Whitworth. WFO Elko anticipates more collaborative projects in the future which will help expand staff knowledge of the hydrology program.

SCIENTIFIC SERVICES DIVISION

USWRP Workshop - A Community Meeting on Real-time and Restrospective

Mesoscale Objective Analysis: A Community Meeting on Real-time and Retrospective Mesoscale Objective Analysis: An Analysis of Record Summit, co-chaired by Brad Colman (WFO Seattle) and John Horel (University of Utah), will examine the needs, data assets, and current and future technologies required to develop accurate mesoscale objective analyses for real-time and retrospective applications. This workshop will take place on June 29-30, 2004, in Boulder, Colorado, at the David Skaggs Research Center.

This gathering is designed to promote creative and free-wheeling discussion, and we hope to have representation from a broad cross section of the community. Members of the workshop should include participants with diverse scientific expertise, including but not necessarily limited to: observing systems, data assimilation methods, mesoscale meteorology and modeling, operational forecasting, and regional climate. Additionally, participants should reflect stakeholder groups, economists, and weather businesses, and be balanced among the private, public, and academic sectors.

Registration will be limited to 75 participants. To register before June 10, please go to the USWRP's meetings web site:

http://box.mmm.ucar.edu/uswrp/upcoming_meetings/upcoming_meetings.html.

WR Best Practices Page Updated: Chelsea Leader (SSD) has updated the WR Best Practices web page. Access <http://ww2.wrh.noaa.gov> and click on the WR Best Practices link. Please follow the logon instructions. Since Chelsea has left the NWS, please send you best practices to Laura Smith (MSD). Rich Douglas (MSD) will be reviewing the best practices before they are added to the page.

SYSTEMS OPERATIONS DIVISION

ASOS: The Spokane ASOS was relocated on May 11, 2004. The relocation could not have been accomplished without the hard work from Rob Sumpter (WFO Spokane), Les Libby (WFO Seattle), Kevin Bolton (WRH), Mike Belarde (WFO Spokane), and Bubba Cummings (WFO Spokane). The ASOS was relocated due to a new taxi-way being constructed.

NWR: The Bear Lake NWR transmitter (WXL-63) was upgraded this week. The Antenna was replaced and the power was increased from 20 watts to 150 watts. The upgrade was completed by Joe Lachacz and Merri Richmond (WRH) along with several amateur radio operators. The upgrade will provide better NWR coverage for Bear Lake and surrounding areas.

EMRS Conference: Joe Lachacz and Son Nguyen (WRH) attended the semi-annual EMRS and Nexrad ORPG conference that was held at the Radar Operation Center (ROC) in Norman, OK. The ROC facility and phased array weather radar were toured.

RRS: George Montenegro (WRH) spent the last week in Sterling, VA, testing and observing the new Radiosonde Replacement System (RRS). George also attended the RRS training class at NWSTC.

Facilities: Several Facilities Engineering Technicians (FETs) attended Powerware UPS Maintenance in Raleigh, NC. The training was provided to familiarize personnel with the maintenance and operation of the Powerware UPS. This will enable Facilities to better provide support to the field offices on the RDA transitional power source. The remaining FETs will attend the same class at the end of this month.